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Remarks and Arguments

Reconsideration is respectfully requested.

Claims 1-22 are pending in the present application before this response. By the present response, no claims have been amended as none is deemed necessary. No new matter has been added. Because this amendment should put the application in condition for allowance and should not require any additional searching, the examiner is requested to enter the Amendment.

Rejections under 35 U.S.C. §103(a)

In the office action (page 4), claims 1, 7, 10-12, 14-19, 21 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2004/0073928 (Alakoski) in view of U.S. Publication No. 2004/0266440 (Fuchs). Further, in the office action (page 7), claims 3-6, 8, 9, 13 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2004/0073928 (Alakoski) in view of U.S. Publication No. 2004/0266440 (Fuchs) and further in view of U.S. Publication No. 2002/0054596 (Sengodan).

The applicant respectfully traverses the rejection.

Claim 1 recites:

--sending ... ***MBMS bearer capabilities of a user equipment (UE)*** from the UE to a SGSN ... ***after passing authorization*--.

Alakoski at best appears to disclose:

"A request message may be received from a mobile device 50 ... at a serving GPRS support node (SGSN) 54 ... to register the mobile device to a specific multicast service, signalling 101 ... It may be verified that the mobile device is authorized to receive generic MBMS bearer data or service, 103".
See paragraph [0041].

That is, in Alakoski, the request message is sent before authorization is performed, and **nowhere has it been mentioned in Alakoski** that the request message contains information similar to MBMS bearer capabilities of a user equipment (UE).

Therefore, the applicant respectfully submits Alakoski does **not** disclose -- sending ... ***MBMS bearer capabilities of a user equipment (UE)*** from the UE to a

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SGSN ... *after passing authorization*".

Claim 1 further recites:

--verifying whether the MBMS bearer capabilities of the UE are less than Required MBMS Bearer Capabilities--.

The applicant respectfully submit that this feature of the presently claimed invention is also not disclosed by Alakoski.

In claim 1, after the UE is authorized, the SGSN needs to determine whether the UE has the ability to receive the MBMS service provided by the network, and decide whether to create MBMS UE Context in the SGSN according to the result of the determination. Two parameters, MBMS bearer capabilities of a UE and Required MBMS Bearer Capabilities, are compared for determining whether to reject or allow a request for activating an MBMS UE Context. If the amount of the MBMS bearer capabilities of the UE are less than the amount of the Required MBMS Bearer Capabilities, the SGSN rejects the request for activating an MBMS UE Context since the UE can not bear the MBMS service; otherwise, allows the request for activating an MBMS UE Context and creates the MBMS UE Context in the SGSN.

In this way, the MBMS UE Context will not be created in the SGSN before determining that the UE can bear the MBMS service via comparing the MBMS bearer capabilities of the UE and the Required MBMS Bearer Capabilities. That is, the situation in which an MBMS UE Context is first activated after receiving a request from a UE and then deactivated after determining that the MBMS bearer capabilities of the UE is not enough for the MBMS service will be avoided, thereby saving signaling interactions between the UE and the network.

Also, it is clearly shown in claim 1 that verifying the MBMS bearer capabilities of the UE is performed after the MBMS bearer capabilities of the UE is sent from the UE to the SGSN, and sending of the MBMS bearer capabilities of the UE is performed after the UE has passed authorization. In other words, **the process of verifying** the MBMS bearer capabilities of the UE **is performed after the process of authorization**, and therefore **is quite different from the process of authorization.**

Alakoski at best appears to disclose:

"Security functions may be performed to authenticate the mobile device 50, signalling 102. It may be **verified that the mobile device is authorized to receive generic MBMS bearer data** or service, 103. The verifying may be based on subscription data retrieved from a Home Location Register (HLR) (not shown) by the SGSN 54."
See paragraph [0041].

That is, in Alakoski, signaling 102 denotes an authentication, while signaling 103 denotes an authorization. Specifically, the authorization 103 in Alakoski is performed via verifying subscription data of a UE for **determining an authority** of the UE, i.e. **whether the UE has an** authority to receive generic MBMS bearer data.

Moreover, it is clearly shown in claim 1 that verifying the MBMS bearer capabilities of the UE is performed after the authorization. This point provides proof from another aspect that the process of verifying the MBMS bearer capabilities of the UE in claim 1 and the process of authorization 103 in Alakoski are two different processes.

Therefore, it is obvious with reference to existing definition on authorization and related description in Alakoski that the authorization in Alakoski is quite different from the process of verifying the MBMS bearer capabilities of the UE in claim 1.

To sum up, Alakoski does not disclose "verifying whether the MBMS bearer capabilities of the UE are less than Required MBMS Bearer Capabilities".

Fuchs does not appear to disclose the claimed feature of --sending ... MBMS bearer capabilities of a user equipment (UE) from the UE to a SGSN ... **after passing authorization** ... verifying whether the MBMS bearer capabilities of the UE are less than Required MBMS Bearer Capabilities-- as well.

In view of the foregoing, Applicant respectfully submits that claim 1 defines over the art cited by the Examiner.

Likewise, claims 2-22, which depend from claim 1, also define over the art cited by the Examiner.

Specifically, claim 3 recites:

--sending a **failure message** which carries a failure reason to a GGSN; and deciding whether to **return back to an IP multicast access of a unicast mode"** after receiving the failure message--.

That is, when the MBMS bearer capabilities of UE do not satisfy the Required

MBMS Bearer Capabilities, the SGSN can change the mode of providing service, such as enabling the GGSN to go back to IP multicast access of unicast mode on the GGSN's initiative. See the present application: paragraph [0082].

In this way, the denied subscribers can receive their requested MBMS service through other approaches ... the subscriber satisfaction and the network utilization coefficient will be improved and ... the receiving method of MBMS service becomes more flexible and diversified. See the present application: paragraph [0082].

It is acknowledged by the Examiner that Alakoski and Fuchs do not teach the above mentioned features of claim 3. Further, the applicant respectfully submits that Sengodan also fails to teach the above mentioned features of claim 3.

Sengodan at best appears to disclose: the discovery unit sets the timer after the first request message is sent and detects whether a confirm message is received before the timer expires and terminates the location of an endpoint when a confirm message is received prior to the expiration of the timer, wherein the discovery unit in a discoverer comprises a base transceiver station, a base station controller or a mobile services switching center, and **the confirm message is the message ... indicating that the Discoverer 210 could use this resource**. See paragraphs [0051], [0069] and [0075].

Specifically, the scheme in Sengodan is as follows: a discoverer sends out a request message designating a first selected scope for finding a node in a multicast tree that can provide resource for it; when none of the nodes within the first selected scope replies a confirm message, the discoverer sends out another request message designating a second selected scope larger than the first selected scope.

It is clear that Sengodan does not disclose after **the GGSN** receives a failure message, the GGSN may **return back to IP multicast access of a unicast mode**.

Therefore, claim 3 is considered as defining over the cited Alakoski and Fuchs and Sengodan. Claims 4-6 are considered as patentable for the similar reasons as claim 3.

Claim 11 based upon claim 3 recites: after receiving the rejection message sent from the SGSN carrying the Required MBMS Bearer Capabilities,

>--*the UE compares the Required MBMS Bearer Capabilities with the MBMS bearer capabilities of the UE*, and *the UE reapplies* to receive the MBMS service *through the unicast mode* if the MBMS bearer capabilities of the UE

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are less than the Required MBMS Bearer Capabilities and the GGSN does not return back to the IP multicast access of the unicast mode--.

That is, in the scheme of claim 11 incorporating all the technical features of claims 1 and 3, verifying capabilities together by the SGSN and the UE are provided, which can ensure reliability of the verification result and make the activation flow of the MBMS service more flexible and diversified. See the present application: paragraph [0081].

None of the three references cited by the Examiner has disclosed performing verifying twice, one is on SGSN and the other is on UE. Therefore, claim 11 is considered as defining over the cited Alakoski and Fuchs and Sengodan.

For the reasons set forth above, the applicants respectfully submits that claims 1-22 pending in this application are in condition for allowance over the cited references. Accordingly, the applicants respectfully requests reconsideration and withdrawal of the outstanding rejections and earnestly solicits an indication of allowable subject matter.

This amendment is considered to be responsive to all points raised in the office action. Should the examiner have any remaining questions or concerns, the examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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